

OAK RIDGE NATIONAL LABORATORY

MANAGED BY UT-BATTELLE FOR THE DEPARTMENT OF ENERGY

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Re: Continuing SciDAC collaboration of “A Scalable and Extensible Earth System Model for Climate Change Science” with the “Earth System Grid Center for Enabling Technologies (ESG-CET)”

Dear Dean,

I am writing to confirm that the project in the DOE Office of Biological and Environmental Research under the Scientific Discovery Through Advanced Computing, entitled “A Scalable and Extensible Earth System Model for Climate Change Science”, of which I am PI with Phil Jones (LANL), intends to continue and extend collaboration with your project “Earth System Grid Center for Enabling Technologies (ESG-CET)”.

As you know, our project is focused on creating a first generation Earth system model based on the Community Climate System Model (CCSM) that treats the coupling between the physical, chemical, and biogeochemical processes in the climate system. If the Earth System Grid were not available we would be unable to distribute our simulation results to the academic and scientific community, we are that dependent on the success of your project. It is a critical piece of infrastructure and your computer science research accomplishments are showing how to deal with large datasets for other scientific disciplines. New visualization methods, including some three dimensional rendering, as an analysis service looks promising. The ESG now contains the results of the C-LAMP experiments which move the community to comparing Earth system models and validating against carbon and ecosystem observational data. This will be remembered as a major step forward in biogeochemical realism of modeling when the dust settles from all the IPCC AR5 and CMIP5 activity that the ESG will support in the next few years. Keep up the good work.

Thanks and I look forward to a continued, productive collaboration.

Yours truly,



John Drake
PI, SciDAC2 CCSM Consortium Project